be developed by an individual or individuals who have been trained in accordance with §120.13 and shall be subject to the recordkeeping requirements of §120.12.

- (c) In evaluating what food hazards are reasonably likely to occur, consideration should be given, at a minimum, to the following:
  - (1) Microbiological contamination;
  - (2) Parasites:
  - (3) Chemical contamination;
  - (4) Unlawful pesticides residues;
- (5) Decomposition in food where a food hazard has been associated with decomposition:
  - (6) Natural toxins;
- (7) Unapproved use of food or color additives;
- (8) Presence of undeclared ingredients that may be allergens; and
  - (9) Physical hazards.
- (d) Processors should evaluate product ingredients, processing procedures, packaging, storage, and intended use; facility and equipment function and design; and plant sanitation, including employee hygiene, to determine the potential effect of each on the safety of the finished food for the intended consumer
- (e) HACCP plans for juice need not address the food hazards associated with microorganisms and microbial toxins that are controlled by the requirements of part 113 or part 114 of this chapter. A HACCP plan for such juice shall address any other food hazards that are reasonably likely to occur.

# § 120.8 Hazard Analysis and Critical Control Point (HACCP) plan.

- (a) HACCP plan. Each processor shall have and implement a written HACCP plan whenever a hazard analysis reveals one or more food hazards that are reasonably likely to occur during processing, as described in §120.7. The HACCP plan shall be developed by an individual or individuals who have been trained in accordance with §120.13 and shall be subject to the record-keeping requirements of §120.12. A HACCP plan shall be specific to:
- (1) Each location where juice is processed by that processor; and
- (2) Each type of juice processed by the processor. The plan may group

types of juice products together, or group types of production methods together, if the food hazards, critical control points, critical limits, and procedures required to be identified and performed by paragraph (b) of this section are essentially identical, provided that any required features of the plan that are unique to a specific product or method are clearly delineated in the plan and are observed in practice.

- (b) The contents of the HACCP plan. The HACCP plan shall, at a minimum:
- (1) List all food hazards that are reasonably likely to occur as identified in accordance with §120.7, and that thus must be controlled for each type of product:
- (2) List the critical control points for each of the identified food hazards that is reasonably likely to occur, including as appropriate:
- (i) Critical control points designed to control food hazards that are reasonably likely to occur and could be introduced inside the processing plant environment; and
- (ii) Critical control points designed to control food hazards introduced outside the processing plant environment, including food hazards that occur before, during, and after harvest;
- (3) List the critical limits that shall be met at each of the critical control points;
- (4) List the procedures, and the frequency with which they are to be performed, that will be used to monitor each of the critical control points to ensure compliance with the critical limits;
- (5) Include any corrective action plans that have been developed in accordance with §120.10(a), and that are to be followed in response to deviations from critical limits at critical control points;
- (6) List the validation and verification procedures, and the frequency with which they are to be performed, that the processor will use in accordance with §120.11; and
- (7) Provide for a recordkeeping system that documents the monitoring of the critical control points in accordance with §120.12. The records shall contain the actual values and observations obtained during monitoring.

## § 120.9

(c) Sanitation. Sanitation controls may be included in the HACCP plan. However, to the extent that they are monitored in accordance with §120.6, they are not required to be included in the HACCP plan.

## §120.9 Legal basis.

Failure of a processor to have and to implement a Hazard Analysis and Critical Control Point (HACCP) system that complies with §§ 120.6, 120.7, and 120.8, or otherwise to operate in accordance with the requirements of this part, shall render the juice products of that processor adulterated under section 402(a)(4) of the Federal Food, Drug, and Cosmetic Act. Whether a processor's actions are consistent with ensuring the safety of juice will be determined through an evaluation of the processor's overall implementation of its HACCP system.

### § 120.10 Corrective actions.

Whenever a deviation from a critical limit occurs, a processor shall take corrective action by following the procedures set forth in paragraph (a) or paragraph (b) of this section.

- (a) Processors may develop written corrective action plans, which become part of their HACCP plans in accordance with §120.8(b)(5), by which processors predetermine the corrective actions that they will take whenever there is a deviation from a critical limit. A corrective action plan that is appropriate for a particular deviation is one that describes the steps to be taken and assigns responsibility for taking those steps, to ensure that:
- (1) No product enters commerce that is either injurious to health or is otherwise adulterated as a result of the deviation; and
- (2) The cause of the deviation is corrected.
- (b) When a deviation from a critical limit occurs, and the processor does not have a corrective action plan that is appropriate for that deviation, the processor shall:
- (1) Segregate and hold the affected product, at least until the requirements of paragraphs (b)(2) and (b)(3) of this section are met;
- (2) Perform or obtain a review to determine the acceptability of the af-

fected product for distribution. The review shall be performed by an individual or individuals who have adequate training or experience to perform such review:

- (3) Take corrective action, when necessary, with respect to the affected product to ensure that no product enters commerce that is either injurious to health or is otherwise adulterated as a result of the deviation:
- (4) Take corrective action, when necessary, to correct the cause of the deviation; and
- (5) Perform or obtain timely verification in accordance with §120.11, by an individual or individuals who have been trained in accordance with §120.13, to determine whether modification of the HACCP plan is required to reduce the risk of recurrence of the deviation, and to modify the HACCP plan as necessary.
- (c) All corrective actions taken in accordance with this section shall be fully documented in records that are subject to verification in accordance with \$120.11(a)(1)(iv)(B) and the record-keeping requirements of \$120.12.

### §120.11 Verification and validation.

- (a) Verification. Each processor shall verify that the Hazard Analysis and Critical Control Point (HACCP) system is being implemented according to design.
- (1) Verification activities shall include:
- (i) A review of any consumer complaints that have been received by the processor to determine whether such complaints relate to the performance of the HACCP plan or reveal previously unidentified critical control points;
- (ii) The calibration of process monitoring instruments;
- (iii) At the option of the processor, the performance of periodic end-product or in-process testing; except that processors of citrus juice that rely in whole or in part on surface treatment of fruit shall perform end-product testing in accordance with § 120.25.
- (iv) A review, including signing and dating, by an individual who has been trained in accordance with §120.13, of the records that document:
- (A) The monitoring of critical control points. The purpose of this review